and said superficial contact region form an area substantially at the center of said wafer, and in which said internal strip regions and superficial grid contact regions extend towards the outside of said central area.

4. A multichannel field-effect semiconductor device as set forth in claim 1 in which one at least of said source and drain regions is an epitaxially grown region and in which said perforated region, solid region and strip regions of said internal grid are diffused regions located partially in said substrate wafer and partially in said epitaxially grown region.

5. A multichannel field-effect semiconductor device comprising a substrate wafer of semiconductor material of a given type of conductivity and a layer of same said type of conductivity epitaxially grown onto said wafer, source and drain regions on the parallel major faces of said wafer and epitaxially grown layer, a diffused internal grid of the opposite type to said given type of conductivity, said grid including a perforated region defining conductive channels transverse thereto, a solid region and strip regions both devoid of conductive channels, said strip regions extending from said solid region, the thickness of said epitaxially grown layer being reduced in the portions thereof located above said grid solid and strip regions, and a superficial grid contact region of said opposite type of conductivity, diffused into the portions of said epitaxially grown layer of reduced thickness and in ohmic contact therewith, said strip regions causing said perforated region to be substantially equipotential.

6. A multichannel field-effect semiconductor device as set forth in claim 1 in which said source and drain regions are coated with a metallized layer.

7. A multichannel field-effect semiconductor device as set forth in claim 1 in which said diffused superficial grid contact region disposed above said internal solid and strip regions is coated with a metallized layer.

8. A multichannel field-effect semiconductor device as set forth in claim 1 in which said diffused superficial grid contact region disposed above said internal solid and strip regions is coated with an insulating film on a part

of its surface, the part of latter said surface not coated with said insulating film and said insulating film itself being coated with a metallized layer.

9. A multichannel field-effect semiconductor device as set forth in claim 5 in which said epitaxially grown layer is said source region and in which said drain region is adjacent a major face of said wafer and the resistivity of said epitaxially grown region is higher than the resistivity of said substrate wafer

10. A multichannel field-effect semiconductor device as set forth in claim 5 in which said epitaxially grown layer is said drain region and in which said source region is adjacent a major face of said wafer and the resistivity of said epitaxially grown region is less than the resistivity of said substrate wafer.

11. A multichannel field-effect semiconductor device comprising a substrate wafer of semiconductor material of a given type of conductivity, source and drain regions on the parallel major faces of said wafer, a diffused internal grid of the opposite type to said given type of conductivity, said grid including a perforated region defining conductive channels transverse thereto and a solid region devoid of conductive channels located substantially at the center of said wafer, a diffused superficial grid contact region of said opposite type of conductivity, disposed above said internal grid solid region and in ohmic contact therewith and an insulating layer disposed in the plane of said grid and surrounding it, said insulating layer preventing any short-circuit path between said source and drain regions.

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